

IN THE CLAIMS

Please cancel claims 1-39 and add new claims 40-67:

1 - 39 (cancelled)

40. (new) A valve comprising: first and second ports and a flow path therebetween; a valve seat formed about one of said ports; a valve member that is selectively moved with respect to said valve seat; an actuator coupled to said valve member to move said valve member with respect to said valve seat; and an adjustable mechanism which cooperates with said actuator to determine the axial movement of the actuator and the valve member in a direction toward the valve seat.

41. (new) The valve of claim 40 wherein the adjustable mechanism can be positioned to allow sealing engagement of the valve member with the valve seat and can be positioned to prevent sealing engagement of the valve member with the valve seat.

42. (new) The valve of claim 41, wherein said adjustable mechanism comprises a first lock nut that is threadably engaged on said adjustor.

43. (new) The valve of claim 42, wherein said first lock nut engages a portion of an actuator housing when located on a first position of said adjustor, wherein said engagement with said valve housing prevents the valve member from engaging said valve seat.

44. (new) The valve of claim 43 further comprising a second lock nut that engages said first lock nut to prevent rotation of the first nut.

45. (new) The valve of claim 40 wherein the adjustable mechanism defines at least a portion of an actuator inlet port

46. (new) The valve of claim 40, wherein said adjustable mechanism comprises a one-piece adjustable port that is threaded into a top portion of a valve housing.
47. (new) The valve of claim 46, wherein said one-piece adjustable port comprises a shaft that engages a portion of said actuator.
48. (new) The valve of claim 47, wherein said one-piece adjustable port engages said actuator to prevent the piston from moving in the axial direction.
49. (new) The valve of claim 40, wherein said adjustable mechanism comprises a two-piece adjustable port that is threaded into a top portion of a valve housing.
50. (new) The valve of claim 40, wherein said adjustable mechanism is positioned to prevent said valve member from sealing against the valve seat when the valve is in a closed position.
51. (new) A valve comprising: first and second ports and a flow path therebetween; a valve seat formed about one of said ports; a valve member that is selectively moved with respect to said valve seat; an actuator coupled to said valve member to move said valve member with respect to said valve seat; and an adjustable mechanism which cooperates with said actuator to determine the axial movement of the actuator and the valve member he valve seat, wherein the adjustable mechanism defines at least a portion of an actuator inlet port.
52. (new) The valve of claim 51, wherein said adjustable mechanism comprises a one-piece adjustable port that is threaded into a top portion of a valve housing.
53. (new) The valve of claim 52, wherein said one-piece adjustable port comprises a shaft that engages a portion of said actuator.
54. (new) The valve of claim 53, wherein said one-piece adjustable port engages said actuator to prevent the piston from moving in the axial direction.

55. (new) The valve of claim 51, wherein said adjustable mechanism comprises a two-piece adjustable port that is threaded into a top portion of a valve housing.

56. (new) A valve comprising: three fluid ports, each having a fluid passageway; a connecting fluid passageway wherein each of said port fluid passageways connect to said connecting fluid passageway; a valve element including two sealing members, one sealing member which seals against a first valve seat located at a first end of said connecting fluid passageway when said valve element is in a first position and one sealing member which seals against a second valve seat located at a second end of said connecting fluid passageway when said valve element is in a second position; a piston connected to said valve element; and an adjustable mechanism which is selectively positioned to determine the axial movement of the valve element.

57. (new) The valve of claim 56, wherein when said valve element is in a third position, neither the first nor second sealing members seal against their respective valve seats.

58. (new) A valve actuator including: at least one piston contained within an actuator housing; and an adjustable mechanism that selectively engages at least a portion of said at least one piston to selectively adjust axial movement of said at least one piston, wherein the adjustable mechanism defines at least a portion of an actuator inlet port.

59. (new) The valve actuator of claim 58, wherein said adjustable mechanism is a one-piece port.

60. (new) The valve actuator of claim 58, wherein said adjustable mechanism is a two-piece port.

61. (new) A valve comprising: at least two ports and fluid passageways therebetween; a valve member that includes a portion that aligns with at least one of said ports to determine the flow through said fluid passageways; a piston that cooperates with said valve member to selectively move said valve member axially towards and away from said at least one of said fluid passageways; a means for preventing said portion of said valve member from sealing against said

at least one of said fluid passageways thereby preventing flow through said at least one of said fluid passageways.

62. (new) A valve comprising: at least one port; a valve element that includes a portion that aligns with said at least one port to control the flow therethrough; a piston that cooperates with said valve element to selectively move said valve element axially towards and away from said at least one port; a means for adjusting the force required to move said valve element away from said at least one port.

63. (new) The valve of claim 62 wherein said means for adjusting the force required to move said valve element away from said at least one port comprises a spring and a spring engagement surface, wherein the position of said spring engagement surface can be adjusted axially to compress or allow expansion of said spring.

64. (new) A valve comprising: a diaphragm that is axially moved into and out of engagement with a valve seat; a piston coupled with said diaphragm, said piston movable axially toward the valve seat; and a means for limiting piston movement toward the valve seat.

65. (new) The valve of claim 64, wherein the means for limiting piston movement toward the valve seat prevents the piston from sealing said diaphragm against said valve seat.

66. (new) A valve comprising: three or more fluid ports, each having a fluid passageway; a connecting fluid passageway wherein each of said port fluid passageways flow; a diaphragm element including two engagement members, a first engagement member which engages a first valve seat located at a first end of said connecting fluid passageway and a second engagement member which engages a second valve seat located at a second end of said connecting fluid passageway; and a piston connected to said diaphragm element and axially movable to selectively position said diaphragm member in a first position wherein said first engagement member engages said first valve seat, a second position wherein said second engagement member engages said second valve seat, or a third position between said first and second positions.

67. (new) A valve assembly comprising: three or more ports; a valve member that selectively control flow between said three or more ports; and an adjustment mechanism that controls the relative flow between said three or more ports.